Work Order ID 111601

January-15-14 1:19:21 PM

111601

D4695-6

B 111601

Item ID: D4695-6 **Accept** *N900040100* **Setup Start** *NS1*

Revision ID: **Stop** *NS2*

Item Name: Channel

Start Date: 1/22/14 **Start Qty:** 2.00 *2*

Required Date: 1/27/14 **Req'd Qty:** 2.00 *2*

Reference:

Cust Item ID:

Customer:

Run Start *NR1*

Stop *NR2*

Approvals: **Process Plan:** ML5 **Date:** 14-01-17 **Tooling:** _____ **Date:** _____

QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	**Revision Nbr**								
D4695	B								
100	FLOW WATER JET	0.00							
100						8	mm/ea	14/03/20	
Waterjet	**Memo**	0.00							
FLOW CNC Waterjet	1-Cut D4695-5F as per Dwg Dwg Rev: D4695 Prog Rev: B 2-Deburr if necessary								
									P10 >
110	QC2- Inspect parts off machine FAI/FAIB	0.00							
110						8	mm/ea	14/03/20	
QC	**Memo**	0.00							
Quality Control									
		DAS 27 9-89							
120	QC8- Inspect parts - second check	0.00							
120		14/3/21				8			
QC	**Memo**	0.00							
Quality Control									

DQA: [signature] Date: 14/03/29

QA Closed: [signature] Date: 14/3/28

WORK ORDER NON-CONFORMANCE / UPDATE

DART AEROSPACE

Work Order update only ☐

Work Order: 111601

Part No. D 469 5 6

NCR No. 14-379

DISPOSITION

Rework	☒
Scrap	☐
Use-as-is	☐
Suspected Unapproved	☐

AGAINST DEPARTMENT/PROCESS

Skid-tube	☐	Crosstube	☐	Water Jet	☒
Machining	☐	Small Fab	☐	Prod. Eng. Coor.	☐
Thermoforming	☐	Finishing	☐	Rec/Store/Packaging	☐
Large Fab	☐	Composite	☐	Supplier	☐

Engineering	☐
Quality	☐
Other	☐
	☐

Root Cause		Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design	☐	14/3/20	100	4	Cut w/ grain at 45° to save mat'l RC. Process change	[signature] 14/3/20	Acceptable. Bends will be O/C	[signature] 14/3/20	[signature] 14/03/26	[signature] 14/3/26
Doc/Data	☐									
Equip/Tooling	☐									
Handling/Pre	☐									
Material	☐									
Operator	☐									
Offset/Setup	☐									
Process	☒									
Supplier	☐									
Training	☐									
Transport	☐									
Unapproved	☐									

FAULT CATEGORY

Landing Gear

☐	Bending
☐	Centre Not Concentric
☐	Cracks
☐	Crimp/Kink/Ripple/Wave
☐	Cuffs
☐	Crushing
☐	Heat Treat
☐	Inspection Strip in Tube
☐	Marks/Chatter
☐	Turning Sequence
☐	Wave/Twist in Tube

General

☐	Bend
☐	BOM/Route
☐	Broken/Damage/Defect
☐	Burrs
☐	Contamination
☐	Countersink
☐	Cut Too Short
☐	Drawing
☐	Drill Holes
☐	Finish
☐	Fit/Function

☐	Folio/Program
☒	Grain
☐	Hardware
☐	Inspection Incomplete/Unqualified
☐	Instructions Incomplete/Unclear
☐	Misaligned/off center
☐	Mislabeled
☐	Misread
☐	Off-set
☐	Out of Calibration
☐	Out of Sequence

☐	Outside Dimensions
☐	Over/Under tolerance
☐	Part Incorrect
☐	Part Lost/Missing
☐	Part Moved
☐	Positioned Wrong
☐	Power Loss/Surge

☐	Pressure/Forced
☐	Set-up
☐	Temperature/Cure
☐	Weld
☐	Wrong Stock Pulled
☐	Other

Item ID: D4695-6 **Accept** *N900040100* **Setup Start** *NS1*
Revision ID: **Stop** *NS2*
Item Name: Channel

Start Date: 1/22/14 **Start Qty:** 2.00 *2*
Required Date: 1/27/14 **Req'd Qty:** 2.00 *2*
Reference:

Cust Item ID:
Customer:

Run Start *NR1*
Stop *NR2*

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____
QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	Bend as per dwg	0.00							1/03/25
130	NC BRAKE			DAS 30 9-89		8			
Brake NC	**Memo**	0.00							
Brake NC									
150	QC5- Inspect part completeness to step on W/O	0.00		DAS 27 9-89					
150						8			
QC	**Memo**	0.00		1/3/25					
Quality Control									
160	Chemical Conversion Coat per QSI005 4.1	0.00							
160						8	1/3/25		
HandFinish	**Memo**	0.00							
Hand Finishing									

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

DART AEROSPACE

QA Closed: Date: Work Order update only ☐

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

- Rework ☐
- Scrap ☐
- Use-as-is ☐
- Suspected Unapproved ☐

AGAINST DEPARTMENT/PROCESS

- Skid-tube ☐
- Machining ☐
- Thermoforming ☐
- Large Fab ☐
- Crosstube ☐
- Small Fab ☐
- Finishing ☐
- Composite ☐
- Water Jet ☐
- Prod. Eng. Coor. ☐
- Rec/Store/Packaging ☐
- Supplier ☐
- Engineering ☐
- Quality ☐
- Other ☐

Root Cause		Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design	☐									
Doc/Data	☐									
Equip/Tooling	☐									
Handling/Pre	☐									
Material	☐									
Operator	☐									
Offset/Setup	☐									
Process	☐									
Supplier	☐									
Training	☐									
Transport	☐									
Unapproved	☐									

FAULT CATEGORY

Landing Gear

- ☐ Bending
- ☐ Centre Not Concentric
- ☐ Cracks
- ☐ Crimp/Kink/Ripple/Wave
- ☐ Cuffs
- ☐ Crushing
- ☐ Heat Treat
- ☐ Inspection Strip in Tube
- ☐ Marks/Chatter
- ☐ Turning Sequence
- ☐ Wave/Twist in Tube

General

- ☐ Bend
- ☐ BOM/Route
- ☐ Broken/Damage/Defect
- ☐ Burrs
- ☐ Contamination
- ☐ Countersink
- ☐ Cut Too Short
- ☐ Drawing
- ☐ Drill Holes
- ☐ Finish
- ☐ Fit/Function
- ☐ Folio/Program
- ☐ Grain
- ☐ Hardware
- ☐ Inspection Incomplete/Unqualified
- ☐ Instructions Incomplete/Unclear
- ☐ Misaligned/off center
- ☐ Mislabeled
- ☐ Misread
- ☐ Off-set
- ☐ Out of Calibration
- ☐ Out of Sequence
- ☐ Outside Dimensions
- ☐ Over/Under tolerance
- ☐ Part Incorrect
- ☐ Part Lost/Missing
- ☐ Part Moved
- ☐ Positioned Wrong
- ☐ Power Loss/Surge
- ☐ Pressure/Forced
- ☐ Set-up
- ☐ Temperature/Cure
- ☐ Weld
- ☐ Wrong Stock Pulled
- ☐ Other

Item ID: D4695-6 **Accept** *N900040100* **Setup Start** *NS1*
Revision ID: **Stop** *NS2*
Item Name: Channel
Start Date: 1/22/14 **Start Qty:** 2.00 *2* **Cust Item ID:**
Required Date: 1/27/14 **Req'd Qty:** 2.00 *2* **Customer:**
Reference:

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____ **Run Start** *NR1*
QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____ **Stop** *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
180	QC7-Inspect Chemical Conversion Coat	0.00 DAS 27 3-85				8			
180 QC Quality Control	**Memo**	0.00 14/3/25							
190	Identify as per dwg & Stock Location: ST119	0.00							
190 Packaging Packaging	**Memo**	0.00				8X	DAS 28 3-85	14-03-26	
200	QC21- Final Inspection - Work Order Release	0.00							
200 QC Quality Control	**Memo**	0.00				MLJ	14-03-26		

MLJ 14-03-26

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date: Work Order update only ☐

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

Rework ☐
Scrap ☐
Use-as-is ☐
Suspected Unapproved ☐

AGAINST DEPARTMENT/PROCESS

Skid-tube ☐ Crosstube ☐ Water Jet ☐ Engineering ☐
Machining ☐ Small Fab ☐ Prod. Eng. Coor. ☐ Quality ☐
Thermoforming ☐ Finishing ☐ Rec/Store/Packaging ☐ Other ☐
Large Fab ☐ Composite ☐ Supplier ☐

Root Cause		Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design	☐									
Doc/Data	☐									
Equip/Tooling	☐									
Handling/Pre	☐									
Material	☐									
Operator	☐									
Offset/Setup	☐									
Process	☐									
Supplier	☐									
Training	☐									
Transport	☐									
Unapproved	☐									

FAULT CATEGORY

Landing Gear

☐ Bending
☐ Centre Not Concentric
☐ Cracks
☐ Crimp/Kink/Ripple/Wave
☐ Cuffs
☐ Crushing
☐ Heat Treat
☐ Inspection Strip in Tube
☐ Marks/Chatter
☐ Turning Sequence
☐ Wave/Twist in Tube

General

☐ Bend
☐ BOM/Route
☐ Broken/Damage/Defect
☐ Burrs
☐ Contamination
☐ Countersink
☐ Cut Too Short
☐ Drawing
☐ Drill Holes
☐ Finish
☐ Fit/Function
☐ Folio/Program
☐ Grain
☐ Hardware
☐ Inspection Incomplete/Unqualified
☐ Instructions Incomplete/Unclear
☐ Misaligned/off center
☐ Mislabeled
☐ Misread
☐ Off-set
☐ Out of Calibration
☐ Out of Sequence
☐ Outside Dimensions
☐ Over/Under tolerance
☐ Part Incorrect
☐ Part Lost/Missing
☐ Part Moved
☐ Positioned Wrong
☐ Power Loss/Surge
☐ Pressure/Forced
☐ Set-up
☐ Temperature/Cure
☐ Weld
☐ Wrong Stock Pulled
☐ Other

Picklist Print

January-15-14 1:19:21 PM

Work Order ID: **111601**

Parent Item: **D4695-6** **Start Date:** 1/22/14 **Required Date:** 1/27/14

Parent Item Name: Channel **Start Qty:** 2.00 **Required Qty:** 2.00

Comments: IPP REV:A 12.08.07 NEW ISSUE DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M6061T6S.040 6061-T6 .040 Sheet		Purchased	No			100	sf	208.9500	**0.109**	**0.2294736** EZ 14-3-20			

Location	Loc Qty	Loc Code
MAT021	208.95	
m126350	86	
m126981	122.95	

128422 x 2.5' ft - 9.50

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date: Work Order update only ☐

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

Rework ☐
Scrap ☐
Use-as-is ☐
Suspected Unapproved ☐

AGAINST DEPARTMENT/PROCESS

Skid-tube ☐ Crosstube ☐ Water Jet ☐ Engineering ☐
Machining ☐ Small Fab ☐ Prod. Eng. Coor. ☐ Quality ☐
Thermoforming ☐ Finishing ☐ Rec/Store/Packaging ☐ Other ☐
Large Fab ☐ Composite ☐ Supplier ☐ ☐

Root Cause		Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design	☐									
Doc/Data	☐									
Equip/Tooling	☐									
Handling/Pre	☐									
Material	☐									
Operator	☐									
Offset/Setup	☐									
Process	☐									
Supplier	☐									
Training	☐									
Transport	☐									
Unapproved	☐									

FAULT CATEGORY

Landing Gear

☐ Bending
☐ Centre Not Concentric
☐ Cracks
☐ Crimp/Kink/Ripple/Wave
☐ Cuffs
☐ Crushing
☐ Heat Treat
☐ Inspection Strip in Tube
☐ Marks/Chatter
☐ Turning Sequence
☐ Wave/Twist in Tube

General

☐ Bend
☐ BOM/Route
☐ Broken/Damage/Defect
☐ Burrs
☐ Contamination
☐ Countersink
☐ Cut Too Short
☐ Drawing
☐ Drill Holes
☐ Finish
☐ Fit/Function

☐ Folio/Program
☐ Grain
☐ Hardware
☐ Inspection Incomplete/Unqualified
☐ Instructions Incomplete/Unclear
☐ Misaligned/off center
☐ Mislabeled
☐ Misread
☐ Off-set
☐ Out of Calibration
☐ Out of Sequence

☐ Outside Dimensions
☐ Over/Under tolerance
☐ Part Incorrect
☐ Part Lost/Missing
☐ Part Moved
☐ Positioned Wrong
☐ Power Loss/Surge

☐ Pressure/Forced
☐ Set-up
☐ Temperature/Cure
☐ Weld
☐ Wrong Stock Pulled

☐ Other _____

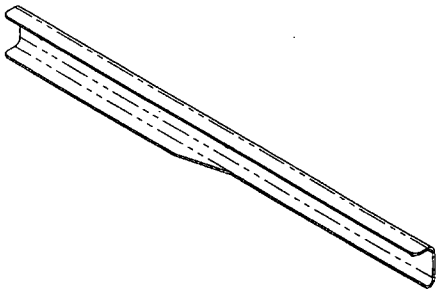
DART AEROSPACE LTD	Work Order:	111601
Description: Channel	Part Number:	D4695-6
Inspection Dwg: D4695 **Rev:** B		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

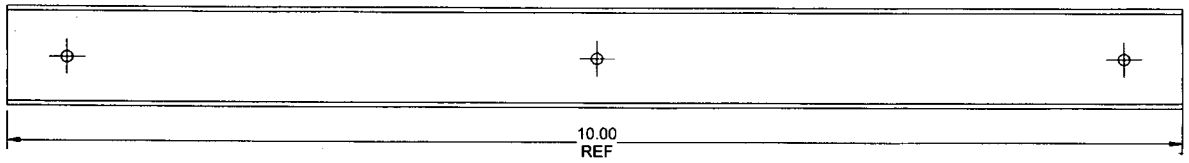
Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø0.098	+0.004/-0.001	0.098	✓		JKm-05	
0.79	+/-0.030	0.79	✓			
1.57	+/-0.030	1.57	✓			
0.50	+/-0.030	0.50	✓			
5.00	+/-0.030	5.00	✓			
9.50	+/-0.030	9.50	✓			
10.00	+/-0.030	10.00	✓			
0.040	+/-0.010	0.042	✓			

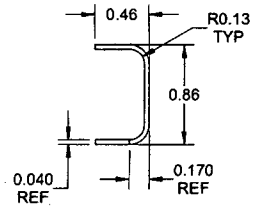
Measured by:	mm/ CL	Audited by:	DAS 27 9-69	Preliminary Approval:	
Date:	14/03/20	Date:		Date:	

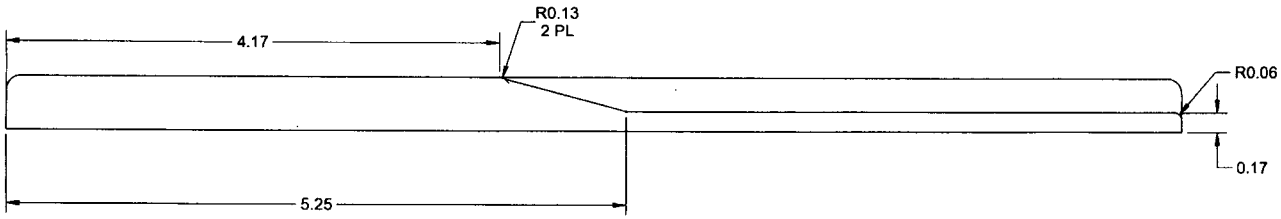
Rev	Date	Change	Revised by	Approved
A	13.03.07	New Issue	KJ	
B	13.04.12	Dwg Rev updated	KJ	



111601 MCS
1401-17







D4695-6 CHANNEL

RELEASED
2013 -04- 02

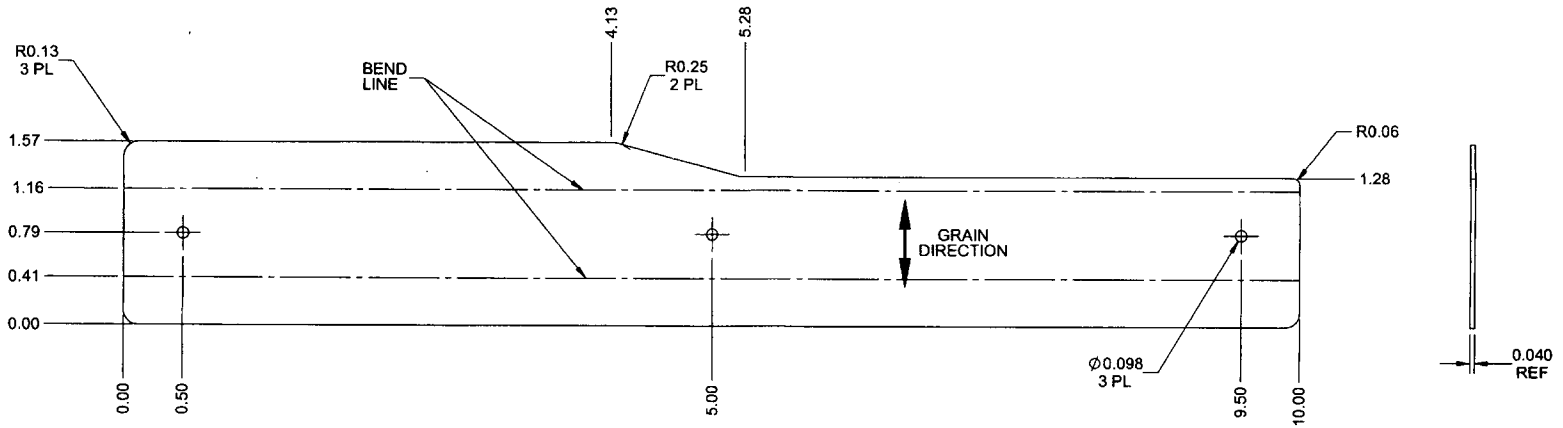
NOTES:
1) MATERIAL: MAKE FROM D4695-5F FLAT PATTERN
2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: N/A
7) WEIGHT: 0.06 lbs

DESIGN	RF
DRAWN	RF
CHECKED	SC
MFG. APPR.	
APPROVED	
DE APPR.	
DATE	13.03.13

DART AEROSPACE LTD
HAWKESBURY, ONTARIO, CANADA

DRAWING NO. D4695 REV. B
SHEET 11 OF 12
TITLE CHANNEL ASSEMBLY SCALE NTS

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D4695-5F FLAT PATTERN CHANNEL (B)

RELEASED
2013 -04- 02

NOTES:
1) MATERIAL: 6061-T6/T62 ALUMINUM SHEET 0.040 THICK
PER QQ-A-250/11 OR AMS-QQ-A-250/11
OR AMS 4025 OR AMS 4027 OR ASTM B209
REF DART SPEC M6061T6S.040
2) FINISH: N/A
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: N/A
7) WEIGHT: 0.06 lbs

DESIGN	RF	**DART AEROSPACE LTD** HAWKESBURY, ONTARIO, CANADA
DRAWN	RF	
CHECKED		DRAWING NO. D4695 REV. B
MFG. APPR.		SHEET 12 OF 12
APPROVED		TITLE CHANNEL ASSEMBLY SCALE NTS
DE APPR.		
DATE 13.03.13		

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